

## **CLAIMS**

I claim:

1. A method comprising:  
detecting a level on each of a plurality of data channels;  
summing the levels of a subset of data channels to get a summed level, the subset  
of data channels containing the lowest levels present in the plurality of  
data channels;  
comparing the summed level with the highest level present in the plurality of data  
channels; and  
rejecting a common mode interference in each of the plurality of data channels if  
the summed level exceeds the highest level present in the plurality of data  
channels.
2. The method of claim 1, where the detecting includes monitoring every data point  
of the plurality of data channels.
3. The method of claim 1, where the detecting includes detecting a level on each of  
seven data channels.
4. The method of claim 1, where the detecting includes detecting a pulse on each of  
a plurality of data channels.

5. The method of claim 1, where the summing the levels of the subset of data channels includes summing the levels of three data channels.
6. The method of claim 5, where the summing the levels of three data channels includes summing the three lowest levels present in the plurality of data channels.
7. The method of claim 1, further comprising multiplying the summed level by a sensitivity factor.
8. The method of claim 7, further comprising adjusting the sensitivity factor to minimize a false alarm rate.
9. A computer readable medium comprising machine readable instructions for:
  - detecting a level on each of a plurality of data channels;
  - summing the levels of a subset of data channels to get a summed level, the subset of data channels containing the lowest levels present in the plurality of data channels;
  - comparing the summed level with the highest level present in the plurality of data channels; and
  - rejecting a common mode interference in each of the plurality of data channels if the summed level exceeds the highest level present in the plurality of data

channels.

10. The computer readable medium of claim 9, where the detecting includes monitoring every data point of the plurality of data channels.

11. The computer readable medium of claim 9, where the detecting includes detecting a level on each of seven data channels.

12. The computer readable medium of claim 9, where the detecting includes detecting a pulse on each of a plurality of data channels.

13. The computer readable medium of claim 9, where the summing the levels of the subset of data channels includes summing the levels of three data channels.

14. The computer readable medium of claim 9, where the summing the levels of three data channels includes summing the three lowest levels present in the plurality of data channels.

15. The computer readable medium of claim 9, further comprising machine readable instructions for multiplying the summed level by a sensitivity factor.

16. The computer readable medium of claim 15, further comprising machine readable

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instructions for adjusting the sensitivity factor to minimize a false alarm rate.

17. An apparatus comprising:

a plurality of data channels;

an array of input filters coupled to the plurality of data channels;

a pulse detection circuit coupled to the array of input filters;

a common mode rejection circuit coupled to the pulse detection circuit, the

common mode rejection circuit operable to:

sum the levels of a subset of data channels to get a summed level,

the subset of data channels containing the lowest levels

present in the plurality of data channels,

compare the summed level with the highest level present in the

plurality of data channels, and

reject a common mode interference in each of the plurality of data

channels if the summed level exceeds the highest level

present in the plurality of data channels; and

a pulse data queuing and transmission circuit coupled to the common mode

rejection circuit.

18. The apparatus of claim 17, further comprising a guidance circuit coupled to the pulse data queuing and transmission circuit.